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APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/028,814	12/20/2001		Nayon Tomsio	004-6459	5544
22120	7590	07/30/2003			
		V & GRAHAM	EXAMINER		
401 W 15TH SUITE 870			MANDALA, VICTOR A		
AUSTIN, T	X /8/01			ART UNIT	PAPER NUMBER
				2826	1
				DATE MAILED: 07/30/2003	1

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No. 10,028,814			1m				
Examiner Victor A Mandala Jr. 2825 Period for Repty A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. Seatewisers of time may be available under the previous of 37 CFR 1.35(a). In or event, however, may a raply be timely filed seatewisers of time may be available under the previous of 37 CFR 1.35(a). In or event, however, may a raply be timely filed seatewisers of time may be available under the previous of 37 CFR 1.35(a). In or event, however, may a raply be timely filed seatewisers of time may be available under the previous of 37 CFR 1.35(a). In or event, however, may a raply be timely filed seatewise for reply specified above is leaves than thirty (30) days, a reply within the statutory minimum of thirty (30) days with secondared timely. If the period for reply specified above, the maximum statutory pried tile sply and will explore the file to the intelligent of the communication, should be supplied to the submitted specified for reply supplied above, the maximum statutory pried tile sply and will explore the Statutor of the communication. Finally a period for reply specified above, the maximum statutory pried tile sply and will explore the Statutor on the submitted time in the submitted and the submitted split of the submitted statutor in the submitted and the submitted and the submitted statutor in the submitted statutor in the submitted statutor in the submitted statutor. Status 1) Responsive to communication(s) filed on 13 May 2003. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-36 is/are rejected. Claim(s) 1-36 is/are allowed. By Claims 1-36 is/are reject		Application No.	Applicant(s)				
Victor A Mandala Jr. 2828	Office Action Summan	<u> </u>	TOMSIO ET AL.				
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* See the attached detailed Office action for a list of the certified copies not received.	3. Copies of the certified copies of the pricapplication from the International Bu	ority documents have been recei ureau (PCT Rule 17.2(a)).	ved in this National Stage				
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).							
a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.	a) The translation of the foreign language pro	ovisional application has been re	eceived.				
Attachment(s)	•	30					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	2) D Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) D Notice of Informa					

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- 1. Claims 3-8 and 15-27 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. A via extending there between, with a first conductor disposed on said first surface and extending from said via, and a second conductor disposed on said second surface and extending from said via, with said via placing said first and second conductors in electrical communication is critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). There is no disclosed single via that extends from the first to the second surface where there are conductors on each of the opposing surfaces. Is the first conductor the solders balls, then where are the second?
- 2. Claims 9-14 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. A first surface and a plurality of vias extending there between, with said first and second conductors disposed on said first surface and a third conductor disposed on said second surface, with said first and third conductors and extending from a first of plurality of vias and said second and third conductors extending from a second of said plurality of vias is critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). There are no disclosed first and third conductors extending from a plurality of first vias on opposing surfaces.

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Is the first conductor the solders balls, then where are the third? There are no disclosed second and third conductors extending from a plurality of second vias on opposing surfaces. Is the second conductor the solders balls, then where are the third?

2. Claims 28-36 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. A first, second, and third conductor layers, having a first resistive via electrically coupling a first conductor on the first conductor layer to a second conductor on the second conductor layer, and having a second resistive via electrically coupling a third conductor on the first conductor layer to a fourth conductor on the third conductor layer and said first and second vias having a resistive fill disposed therein is critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See In re Mayhew, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). Where or what are the three conductive layers? What or where are the four conductors? Where in the disclosure is these elements taught?

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the single via that extends from the first to the second surface where there are conductors on each of the opposing surfaces, first and third conductors extending from a plurality of first vias on opposing surfaces, second and third conductors extending from a plurality of second vias on opposing surfaces, the three conductive layers, and the four conductors must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

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A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held

in abeyance.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor A Mandala Jr. whose telephone number is (703) 308-6560.

The examiner can normally be reached on Monday through Thursday from 8am till 6pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (703) 308-6601. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

VAMJ July 23, 2003

> nathan j. Flynn Supervisory patent examiner

TECHNOLOGY CENTER 2800